We claim:

1. An isolated polynucleotide comprising a liver-specific expression control sequence; wherein said expression control sequence modulates expression of a vertebrate liver fatty acid binding protein (L-FABP).

2. The isolated polynucleotide of claim 1, wherein said vertebrate is a fish.

3. The isolated polynucleotide of claim 2, wherein said fish is a zebrafish.

4. The isolated polynucleotide of claim 1, wherein said polynucleotide comprises binding sites for HFH(1) having a nucleotide sequence of SEQ ID NO:4, HFH(2) having a nucleotide sequence of SEQ ID NO:5, HNF-1α having a nucleotide sequence of SEQ ID NO:6, and HNF-3β having a nucleotide sequence of SEQ ID NO:7.

5. The isolated polynucleotide of claim 4, further comprising binding sites for PDX1 having a nucleotide sequence of SEQ ID NO:8 and/or PDX2 having a nucleotide sequence of SEQ ID NO:9.

6. The isolated polynucleotide of claim 1, wherein said liver-specific expression control sequence comprises a nucleic acid sequence of SEQ ID NO:1 or a variant thereof having at least 80% homology to said nucleic acid sequence.

7. The isolated polynucleotide of claim 6, wherein said nucleic acid sequence is isolated from upstream region of zebrafish L-FABP.

8. The isolated polynucleotide of claim 1, wherein said nucleic acid sequence of SEQ ID NO:1 or a variant thereof comprises binding sites for HFH(1) having a nucleotide sequence of SEQ ID NO:4, HFH(2) having a nucleotide sequence of SEQ ID NO:5, HNF-1α having a nucleotide sequence of SEQ ID NO:6, and HNF-3β having a nucleotide sequence of SEQ ID NO:7.

9. The isolated polynucleotide of claim 8, further comprising binding sites for PDX1 having a nucleotide sequence of SEQ ID NO:8, and/or PDX2 having a nucleotide sequence of SEQ ID NO:9.

10. The isolated polynucleotide of claim 1, wherein said expression control sequence comprises a nucleic acid sequence of SEQ ID NO:2 or a variant thereof having at least 80% homology to said nucleic acid sequence; wherein said nucleic acid sequence of SEQ ID NO:2 includes said nucleic acid sequence of SEQ ID NO:1.

11. The isolated polynucleotide of claim 1, wherein said expression control sequence comprises a nucleic acid sequence of SEQ ID NO:3 or a variant thereof having at least 80% homology to said nucleic acid sequence; wherein said nucleic acid sequence of SEQ ID NO:3 includes said nucleic acid sequence of SEQ ID NO:1.

12. A recombinant construct comprising a basal promoter and the isolated polynucleotide of claim 1; wherein said polynucleotide is operably linked to a reporter sequence.

13. The recombinant construct of claim 12, wherein said reporter sequence encodes a green fluorescent protein (GFP).

14. The recombinant construct of claim 12, wherein said basal promoter is one selected from the group consisting of a basal promoter of zebrafish, a SV40 promoter, a CMV promoter, or a RSV promoter.

15. A method for detecting L-FABP promoter activity in a eukaryotic cell comprising:

introducing said recombinant construct of claim 12 into said eukaryotic cell, and

detecting the presence and/or activity of said reporter sequence in the cell.

16. A transgenic fish whose somatic and germ cells contain at least one genomically integrated copy of said recombinant construct of claim 12,

wherein said reporter sequence expresses an expression product in a liver of said fish, both spatially and temporally during development of said fish.

17. The transgenic fish of claim 16, wherein said fish is zebrafish.

18. The transgenic fish of claim 16, wherein the reporter encodes a green fluorescent protein (GFP).

19. A method for making a transgenic fish, comprising

introducing said recombinant construct of claim 12 into a fish embryo, and

allowing said fish embryo to develop into said fish; wherein said recombinant construct is integrated into a genome of said fish.

20. The method according to claim 19, wherein said fish is zebrafish.

21. A method for identifying an agent that enhance or suppress liver development comprising:

microinjecting said agent to an embryo of said transgenic zebrafish of claim 18;

allowing said transgenic zebrafish embryo to grow; and

analyzing said liver development during said growth of said transgenic zebrafish visually or under a fluorescent microscope.

22. The method according to claim 21, wherein said liver development is further analyzed *in vitro* by isolating liver cells from said transgenic zebrafish.

23. A method for identifying a gene that affects liver development comprising:

microinjecting an inhibitor of said gene to an embryo of said transgenic zebrafish of claim 18;

allowing said transgenic zebrafish embryo to grow; and

monitoring said liver development during said growth of said transgenic zebrafish visually or under a fluorescent microscope.

24. The method according to claim 23, wherein said inhibitor of said gene is morpholino antisense oligonucleotides and said gene is hhex and zXbp-1.

25. A method for identifying a mutant that generates a liver disease comprising:

microinjecting a mutagen to or UV-irradiating an embryo of said transgenic zebrafish of claim 18;

allowing said zebrafish embryo to grow; and

selecting a mutant by monitoring a progression of said liver disease during said growth of said transgenic zebrafish visually or under a fluorescent microscope.

26. The method according to claim 25, wherein said liver disease is liver necrosis.

27. The method according to claim 26, wherein said liver necrosis is due to *lumpazi*, *gammler*, and *tramp* mutations.

28. The method according to claim 26, wherein said liver necrosis is due to *beefeater* mutation.

29. The method according to claim 25, wherein said liver disease is liver cancer.